

REMARKS

Claims 1-4, 6-7, 9, 11-12 and 14-16 are pending in the present application. Claims 5, 8, 10 and 13 are canceled and claims 1, 4, 9 and 14 are amended. The features of claims 5, 8, 10 and 13 are incorporated into the independent claims. Additionally, support for the amendments to claims 1, 4, 9 and 14 may be found at least on page 19, lines 9-31. Reconsideration of the claims is respectfully requested.

I. Telephone Interview

Applicants thank Examiner Shabana Qureshi for the courtesies extended to Applicants' representative during the October 1, 2004 telephone interview. During the interview, the Examiner agreed that the amendments to the claims overcome the prior art of record. The substance of the telephone interview is summarized in the following remarks.

II. 35 U.S.C. § 102, Alleged Anticipation Based on *Levergood*

The Office Action rejects claims 1, 4-5, 9-10 and 14 under 35 U.S.C. § 102(b) as being allegedly anticipated by *Levergood, Thomas, et. al.*, "AudioFile: A Network - Transparent System for Distributed Audio Applications", Cambridge Research Laboratory, June 11, 1993, hereinafter referred to as *Levergood*. This rejection is respectfully traversed.

As to independent claims 1, 4, 9 and 14, the Office Action states:

Regarding claim 1, *Levergood* teaches a method for a distributed audio server (page 1, paragraph 3 - page 2, paragraph 2), the method comprising the computer implemented steps of:

- Generating audio data (page 2, paragraph 6);
- graphic data is sent to a display server on a client machine specified by a display environment variable (page 23, paragraph 4); and
- audio data is sent to an audio server on the client machine specified by an audio environment variable or an audio command line parameter (page 23, paragraph 4) in a platform-independent application (page 4, paragraph 2). ...

Regarding claim 4, *Levergood* teaches a method of a distributed audio server (page 1), the method comprising computer-implemented steps of:

- Generating audio data in platform-independent application (page 4, paragraph 2; here Levergood teaches that AudioFile does not require specialized protocols or multithreaded environments).
- in response to receiving audio data at an audio driver, determining whether an audio environment variable is defined or an audio command line parameter is defined (page 23, paragraph 4); and
- if an audio environment variable or an audio command line parameter is defined, sending the audio data to an audio server on a client machine specified by the audio environment variable or by the audio command line parameter (page 23, paragraph 4). ...

Regarding claim 9, Levergood taught a data processing system for a distributed audio server (abstract), the data processing system comprising:

- first generating means for generating audio data in a platform-independent application (page 4, paragraph 2);
- determining means for determining, in response to receiving audio data at an audio driver, whether an audio environment variable or an audio command line parameter is defined (page 23, paragraph 4); and
- first sending means for sending, in response to a determination that an audio environment variable or an audio command line parameter is defined, the audio data to a platform-independent audio server on a client machine specified by the audio environment variable or by the audio command line parameter (page 4, paragraph 2; page 23, paragraph 4). ...

Regarding claim 14, Levergood discloses a computer program product on a computer readable medium for use in a data processing system for a distributed audio server (page 1), the computer program product comprising:

- instructions for generating audio data and graphic data in a platform independent application (page 23, paragraph 4);
- instructions for sending the graphic data to a display server on a client machine specified by a display environment variable (page 23, paragraph 4); and
- instructions for sending the audio data to a platform independent audio server (page 4, paragraph 2) on the client machine specified by an audio environment variable or by an audio command line parameter (page 23, paragraph 4).

Office Action dated July 9, 2004, page 2-5.

As amended, claim 1, which is representative of the other rejected independent claim 14 with regard to similarly recited subject matter, reads as follows:

1. A method for a distributed audio server, the method comprising the computer-implemented steps of:

generating audio data and graphic data in a platform-independent application;
sending the graphic data to a display server on a client machine specified by a display environment variable;
sending the audio data to a platform-independent audio server on the client machine specified by an audio environment variable or by an audio command line parameter; and
synchronizing the graphic data and the audio data, wherein the synchronizing includes sending information back to the platform-independent application that generated the audio data and the graphic data, and wherein the information provides an estimate of a delay time between a first time point when an audio packet is sent and a second time point when the audio packet is played.
(emphasis added)

As amended, claim 4, which is representative of the other rejected independent claim 9 with regard to similarly recited subject matter, reads as follows:

4. A method for a distributed audio server, the method comprising the computer-implemented steps of:
generating audio data in a platform-independent application;
in response to receiving the audio data at an audio driver, determining whether an audio environment variable or an audio command line parameter is defined;
if an audio environment variable or an audio command line parameter is defined, sending the audio data to a platform-independent audio server on a client machine specified by the audio environment variable or by the audio command line parameter;
generating graphic data in the platform-independent application;
sending the graphic data to a display server on the client machine specified by a display environment variable; and
synchronizing the graphic data and the audio data, wherein the synchronizing includes sending information back to the platform-independent application that generated the audio data and the graphic data, and wherein the information provides an estimate of a delay time between a first time point when an audio packet is sent and a second time point when the audio packet is played.
(emphasis added)

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). All limitations of the claimed invention must be considered when determining patentability. *In re Lowry*, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031, 1034 (Fed. Cir. 1994). Anticipation focuses on whether a claim reads on the product or process a

prior art reference discloses, not on what the reference broadly teaches. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 218 U.S.P.Q. 781 (Fed. Cir. 1983). Applicants respectfully submit that *Levergood* does not identically show every element of the claimed invention arranged as they are in the claims. Specifically, *Levergood* does not teach or suggest synchronizing the graphic data and the audio data, wherein the synchronizing includes sending information back to the platform-independent application that generated the audio data and the graphic data, and wherein the information provides an estimate of a delay time between a first time point when an audio packet is sent and a second time point when the audio packet is played as recited in claims 1, 4, 9 and 14.

Levergood is directed toward a portable, device-independent, network-transparent system for computer audio systems called AudioFile. AudioFile is similar to the X Window System, but the AudioFile server is a completely separate entity from X Window System server. *Levergood* teaches that audio services should be separate from graphics services (see page 4, last paragraph through page 5, lines 1-2). AudioFile runs on Digital's RISC DECstations under ULTRIX, Digital's Alpha AXP systems under DEC OSF/1 for Alpha AXP, Sun SPARC systems under SunOS, and Silicon Graphics Indigo workstations under IRIX. A source code distribution is available by anonymous FTP over the Internet. Like the X Window System, AudioFile has four main components:

- The Protocol. The AudioFile System defines a wire protocol that links the server with client applications over a variety of local and network communication channels. The semantics of the protocol commands and responses define what servers are expected to do and what services clients can expect.
- Client Library and API. The AudioFile client library and applications programming interface (API) provide a means for applications to generate protocol requests and to communicate with the server using a procedural instead of a message-passing interface.
- The Server. The AudioFile server contains all code specific to individual devices and operating systems. It mediates access to audio hardware devices and exports the device-independent interface to clients.
- Clients. The AudioFile distribution includes several out-of-the-box applications which make the system immediately usable and which serve as illustrations for more complex applications.

Levergood does not teach or suggest synchronizing graphic data and audio data. Further, *Levergood* does not teach or suggest that the step of synchronizing includes sending

information back to a platform-independent application that generated the audio data and the graphic data, and that the information provides an estimate of a delay time between a first time point when an audio packet is sent and a second time point when the audio packet is played as recited in claims 1, 4, 9 and 14.

The Office Action refers to the following portion of *Levergood* as allegedly teaching that graphic data and audio data are synchronized:

There are network protocols, such as NTP[8], which keep the time-of-day clocks approximately synchronized, but no existing systems we are aware of keep interval timers, display, or audio clocks synchronized.

Levergood, page 6, lines 2-4.

This portion of *Levergood* does not teach or suggest synchronizing graphic data and audio data. To the contrary, this portion states that *Levergood* is not aware of any existing systems that synchronize display or audio clocks. Thus, the cited portion of *Levergood* does not teach or suggest synchronizing the graphic data and the audio data, wherein the synchronizing includes sending information back to the platform-independent application that generated the audio data and the graphic data, and wherein the information provides an estimate of a delay time between a first time point when an audio packet is sent and a second time point when the audio packet is played as recited in claims 1, 4, 9 and 14.

Additionally, in paragraph 2, page 6, *Levergood* states that "AudioFile does not provide a complete infrastructure for synchronization; rather, it supplies low-level timing information to its clients." Page 51, lines 1-2, of *Levergood* states that "The AudioFile System includes two suites of application programs. These applications are called "clients" after the fashion of the X Window System." Thus, *Levergood* teaches that AudioFile only supplies low-level timing information to its audio application programs. Thus, *Levergood* does not teach or suggest synchronizing the graphic data and the audio data, wherein the synchronizing includes sending information back to the platform-independent application that generated the audio data and the graphic data, and wherein the information provides an estimate of a delay time between a first time point when an audio packet is sent and a second time point when the audio packet is played as recited in claims 1, 4, 9 and 14.

In view of the above, Applicants respectfully submit that *Levergood* does not teach each and every feature of independent claims 1, 4, 9 and 14, as is required under 35 U.S.C § 102(b). Claims 5 and 10 are canceled. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 1, 4, 9 and 14 under 35 U.S.C § 102(b).

Furthermore, *Levergood* does not teach, suggest, or give any incentive to make the needed changes to reach the presently claimed invention. *Levergood* states on page 6, paragraph 3 that "We envision adding standard client (i.e. application program) library and server mechanisms for synchronizing multiple clocks and for providing clock conversion services to clients, but we have not yet encountered a compelling need to do so." Therefore, *Levergood* would not have been motivated to add the synchronizing feature of claims 1, 4, 9 and 14. Absent the Examiner pointing out some teaching or incentive to implement *Levergood* and the feature of synchronizing graphic data and audio data as recited in claims 1, 4, 9 and 14, one of ordinary skill in the art would not be led to modify *Levergood* to reach the present invention when the reference is examined as a whole. Absent some teaching, suggestion, or incentive to modify *Levergood* in this manner, the presently claimed invention can be reached only through an improper use of hindsight using the Applicants' disclosure as a template to make the necessary changes to reach the claimed invention.

III. 35 U.S.C. § 103, Alleged Obviousness Based on *Levergood*

The Office Action rejects claims 2-3, 6-8, 11-13 and 15-16 under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Levergood*. This rejection is respectfully traversed.

Since claims 2-3, 6-7, 11-12 and 15-16 depend from independent claims 1, 4, 9 and 14, respectively, the same distinctions between *Levergood* and the invention recited in claims 1, 4, 9 and 14, apply to dependent claims 2-3, 6-7, 11-12 and 15-16. As discussed previously, *Levergood* does not teach or suggest synchronizing the graphic data and the audio data, wherein the synchronizing includes sending information back to the platform-independent application that generated the audio data and the graphic data, and wherein the information provides an estimate of a delay time between a first time point when an audio packet is sent and a second time point when the audio packet is played as

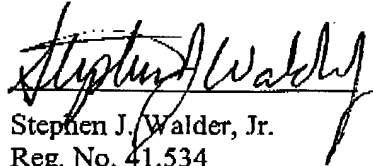
recited in independent claims 1, 4, 9 and 14. Claims 8 and 13 are canceled. Claims 2-3, 6-7, 11-12 and 15-16 recite other features which, when taken in combination with claims 1, 4, 9 and 14, are not taught or suggested by *Levergood*. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 2-3, 6-7, 11-12 and 15-16 under 35 U.S.C. § 103(a).

IV. Conclusion

It is respectfully urged that the subject application is patentable over the cited references and is now in condition for allowance. The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,



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